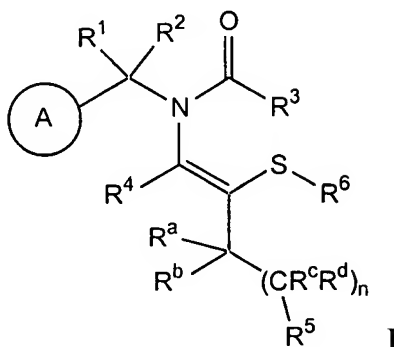
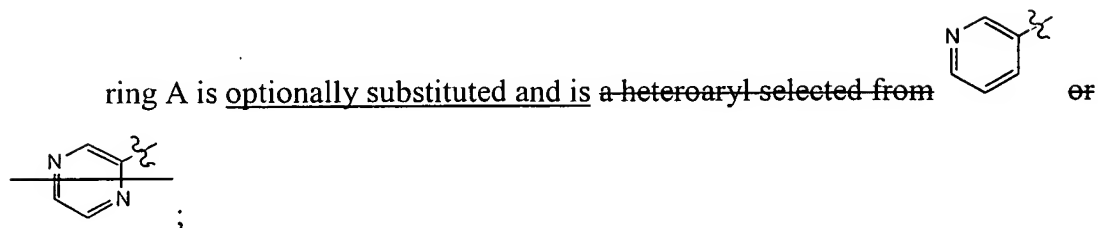


Claim Amendments.

1. (currently amended): A compound of formula I:



or a pharmaceutically acceptable derivative thereof, wherein:



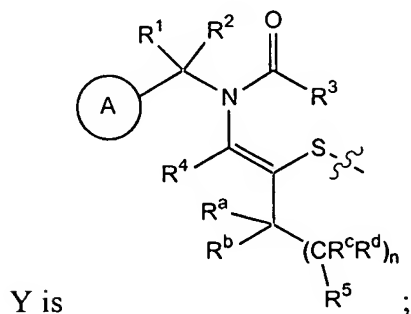
each  $R^1$  and  $R^2$  is independently H, alkyl, or fluoroalkyl;

$R^3$  is H, alkyl, fluoroalkyl, aralkyl, carbocyclylalkyl, heterocyclyl, carbocyclyl, heterocyclylalkyl, aryl, heteroaryl, heteroaralkyl,  $-C(O)R$ ,  $-OR$ ,  $-(CH_2)_{1-6}OR$ ,  $-(CH_2)_{1-6}N(R)_2$ ,  $-N(R)_2$ , or  $-C(H)(OR)R$ ;

$R^4$  is H, alkyl, fluoroalkyl,  $-CO_2R$ ,  $-CON(R)_2$ , carbocyclyl, carbocyclylalkyl, heteroaryl, or heterocyclyl;

$R^5$  is  $-OR^7$  or  $-NR^8R^9$ ;

$R^6$  is  $-C(O)R$ ,  $-C(S)R$ ,  $-C=C-C(O)R$ ,  $-SR$ ,  $-S-W-OR^7$ , M, or Y;



$R^7$  is  $R^\circ$ ,  $-C(O)R$ ,  $-C(O)N(R)_2$ ,  $-C(O)OR$ ,  $-(CH_2)_{1-6}-C(O)R$ ,  $-PO_3M_x$ ,  $-P(O)(alkyl)OM'$ ,  $-(PO_3)_2M_y$ , carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclalkyl, aralkyl, heterocyclalkyl, heteroaralkyl, or a tumor-targeting moiety;

x is 1 or 2;

y is 1, 2 or 3;

each M is independently H, Li, Na, K, Mg, Ca, Mn, Co, Ni, Zn, or alkyl;

M' is H, Li, Na, K, or alkyl;

$R^8$  is H or alkyl;

$R^9$  is H, alkyl,  $-C(O)R$ ,  $-C(O)N(R)_2$ ,  $-C(O)OR$ ,  $-SO_2R$ ,  $-SO_2N(R)_2$ , carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclalkyl, aralkyl, heterocyclalkyl, heteroaralkyl or a tumor targeting moiety;

each  $R^a$  and  $R^b$  is independently H,  $OR^\circ$ , alkyl, or fluoroalkyl;

each  $R^c$  and  $R^d$  is independently H, alkyl, or fluoroalkyl;

n is 0-4;

W is alkylene, arylene, heteroarylene, carbocyclylene, or heterocyclylene;

$R^\circ$  is H or alkyl; and

R is  $R^\circ$ , carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclalkyl, aralkyl, heterocyclalkyl, or heteroaralkyl.

2. (currently amended) The compound of claim 1, wherein  $R^6$  is Y or -SR.

3. (cancelled).

4. (previously amended) The compound of claim 1, wherein:

- i)  $R^1$ ,  $R^2$  and  $R^4$  are independently H,  $C_{1-6}$  alkyl or fluoro( $C_{1-6}$  alkyl);
- ii)  $R^3$  is H, alkyl, fluoroalkyl,  $-(CH_2)_{1-6}OR$ ,  $-(CH_2)_{1-6}N(R)_2$ ,  $-NR^0C(O)R$ ,  $-C(O)R$ ,  $-C(H)(OR)R$ , aralkyl, heterocyclyl, heterocyclalkyl, heteroaryl, or heteroaralkyl;
- iii)  $R^6$  is  $-C=C-C(O)R$ ,  $-SR$ ,  $-S-W-OR^7$ , M or Y;
- iv)  $R^7$  is H, alkyl,  $-C(O)R$ ,  $-PO_3M_x$ ,  $-(PO_3)_2M_y$ ,  $-P(O)(alkyl)OM'$ ,  $-C(O)N(R)_2$ ,  $-C(O)OR$ , or a tumor-targeting moiety; or  $R^9$  is H, alkyl,  $-C(O)R$ ,  $-C(O)N(R)_2$ ,  $-C(O)OR$ ,  $-SO_2R$ , 5-membered heterocyclyl, 5-membered heteroaralkyl, or a tumor-targeting moiety; and
- v) n is 1.

5. (previously amended) The compound of claim 4, wherein R is  $R^0$ , carbocyclyl, aryl, heteroaryl, heterocyclyl, aralkyl, heterocyclalkyl or heteroaralkyl.

6. (previously amended) The compound of claim 5, wherein  $R^0$  is H or  $C_{1-6}$  alkyl optionally substituted with halo, hydroxy or amino.

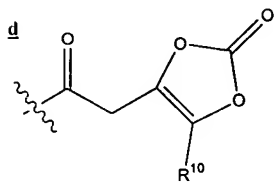
7. (currently amended) The compound of claim 4, wherein ~~said compound has one or more of the features selected from the group consisting of:~~

- i) ring A is optionally substituted with  $-NH_2$ , alkyl,  $-OC(O)R^\dagger$ , halo,  $-OR^\dagger$ ,  $-CF_3$ ,  $-OCF_3$ ,  $-SCF_3$ ,  $-SR^\dagger$ ,  $-R^\dagger$ ,  $-NR^\dagger C(O)R^\dagger$ ,  $-CO_2R^\dagger$ ,  $-NO_2$ ,  $-N(R^\dagger)_2$ ,  $-CN$ ,  $-C(O)R^\dagger$ ,  $-C(O)N(R^\dagger)_2$ ,  $-SO_2N(R^\dagger)_2$ ,  $-NR^\dagger CO_2R^\dagger$ ,  $-C(O)C(O)R^\dagger$ ,  $-OC(O)N(R^\dagger)_2$ ,  $-S(O)_2R^\dagger$ ,  $-C(O)CH_2C(O)R^\dagger$ ,  $-NR^\dagger SO_2R^\dagger$ , or  $-C(=S)N(R^\dagger)_2$ ; and  $R^\dagger$  is 3-6 membered unsubstituted cycloalkyl, phenyl, benzyl, naphthyl, pyridyl, or  $C_{1-6}$  alkyl optionally substituted with halo;
- ii)  $R^3$  is H,  $C_{1-6}$  alkyl,  $-(CH_2)_{1-6}OR^0$  or  $-CH(OR^0)R^0$ ;

iii)  $R^6$  is  $-C=C-C(O)R$ ,  $-SR$ ,  $-S-W-OR^7$  or  $Y$ ; and

iv)  $R^8$  is H or  $C_{1-6}$  unsubstituted alkyl.

8. (currently amended) The compound of claim 7, wherein  $R^7$  or  $R^9$  is H, a polysaccharide,  $-[C(O)CH(R)N(R)]_{2-3}-R$ , an antibody, or



, wherein  $R^{10}$  is H, alkyl, or aryl.

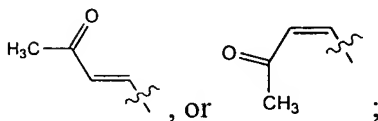
9. (currently amended) The compound of claim 7, wherein ~~said compound has one or more of the features selected from the group consisting of:~~

i) ~~ring A is selected from the group consisting of 1-9;~~

ii)  $R^1$ ,  $R^2$  and  $R^4$  are independently H, methyl, ethyl,  $-CH_2F$ ,  $-CHF_2$ , or  $-CF_3$ ;

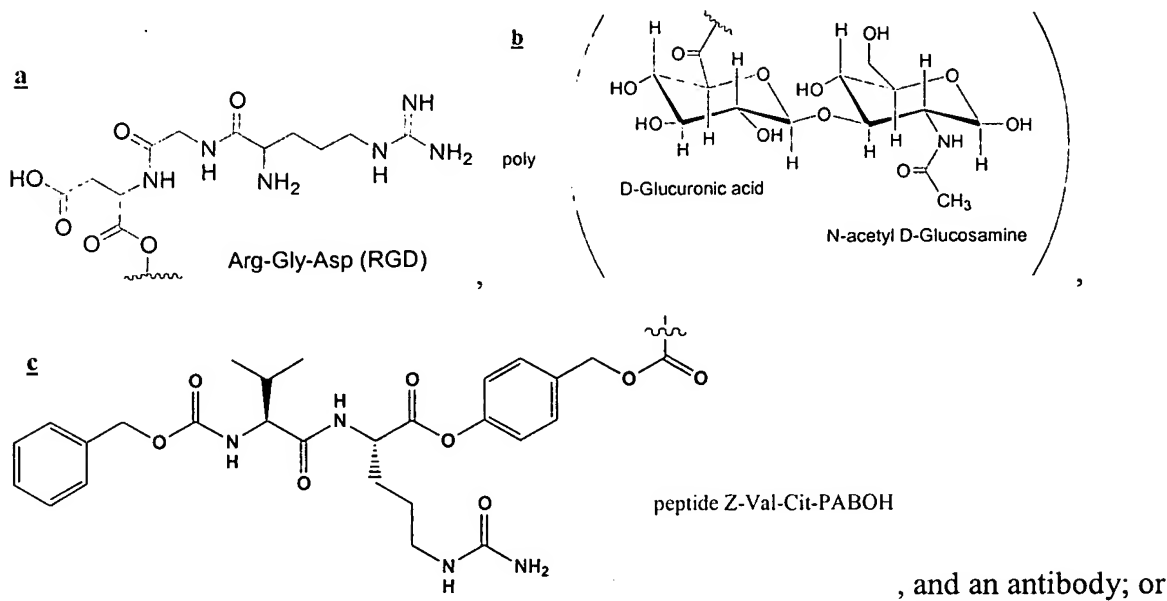
iii)  $R^3$  is H, methyl, ethyl,  $-CH(OH)CH_3$ ,  $-CH_2OH$ , or  $-CH_2CH_2OH$ ;

~~iv~~ iii)  $R^6$  is  $-S-(\text{heterocyclalkyl})$ , ( $-S-(\text{unsubstituted } C_{1-6} \text{ alkyl})$ ),  $Y$ ,

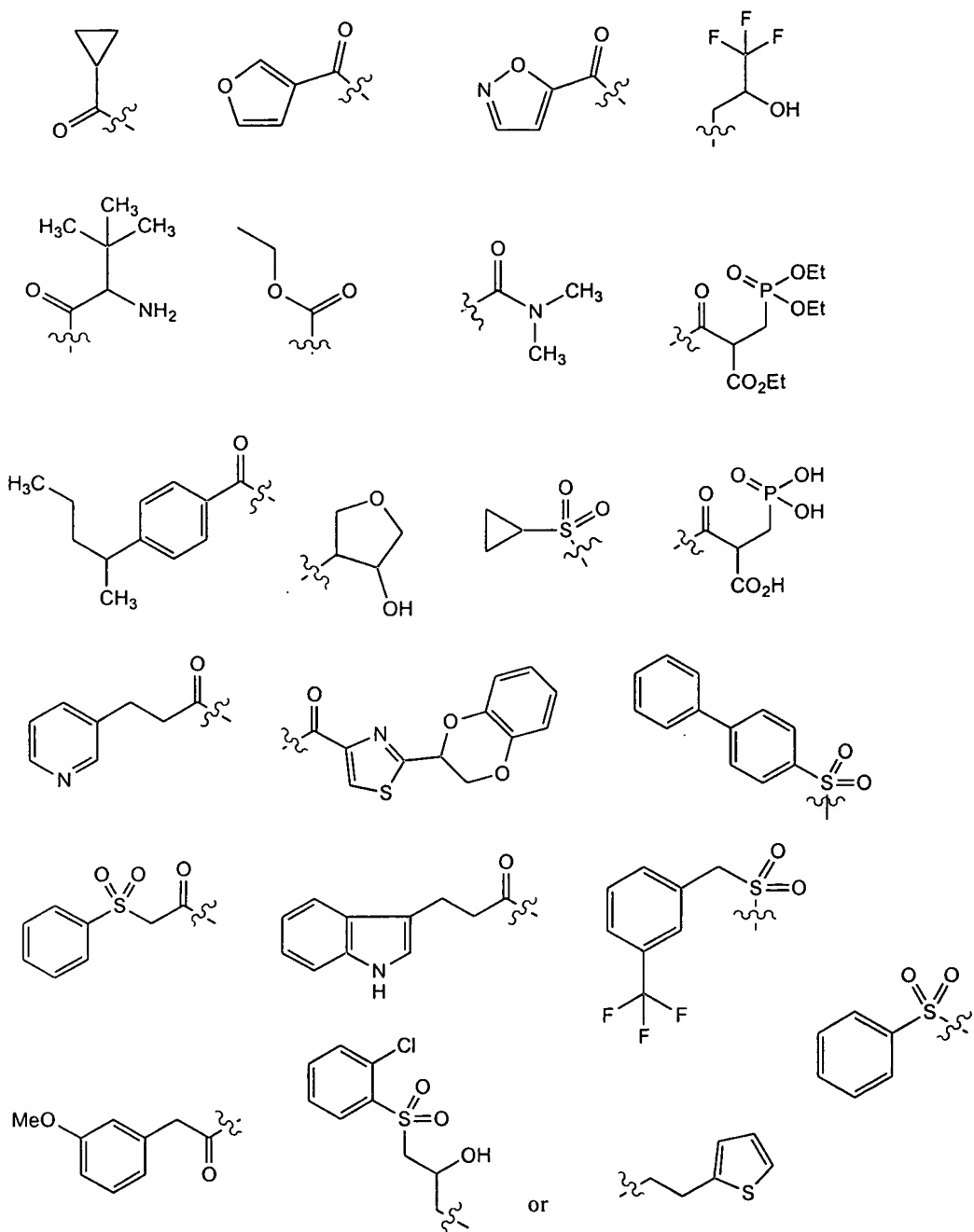


iv)  $R^8$  is H, methyl, or ethyl; and

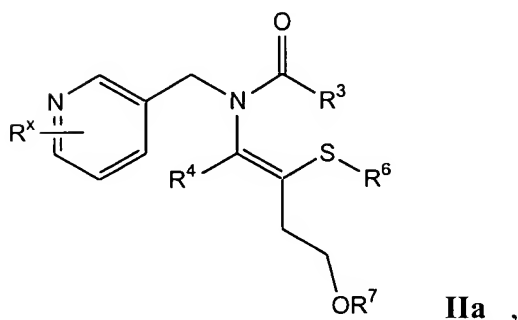
vi)  $R^7$  is H, methyl, ethyl,  $-C(O)Me$ ,  $-C(O)Et$ ,  $-C(O)NMe_2$ ,  $-C(O)-p-OMe$ -phenyl,  $-C(O)O$ -phenyl,  $-PO_3H_2$ ,  $-P(O)(OMe)_2$ ,  $-P(O)(OMe)OH$ ,  $-P(O)(Me)OH$ ,  $-P(O)(OH)OP(O)(OH)(OH)$ , or  $R^{11}$ ; and  $R^{11}$  is selected from the group consisting of:



$R^9$  is H, methyl, ethyl,  $R^{11}$ ,



10. (currently amended) The compound of claim 1, wherein said compound is selected from the group consisting of the compounds of: (1) formula IIa



---

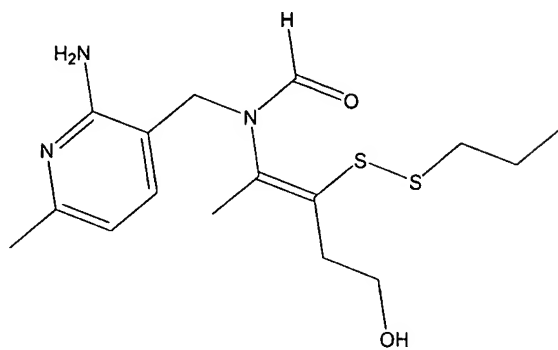
where R<sup>3</sup> and R<sup>4</sup> are independently H or alkyl, R<sup>6</sup> is -SR, R<sup>7</sup> is R<sup>o</sup>, and R<sup>x</sup> can be the same or different and is selected from the group consisting of alkyl and NH<sub>2</sub> (2) formulae ~~III-1~~ 13 to III-18, and or (3) formulae ~~IV-1~~ 13 to IV-18.

11. (previously amended) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

12.-22. (cancelled).

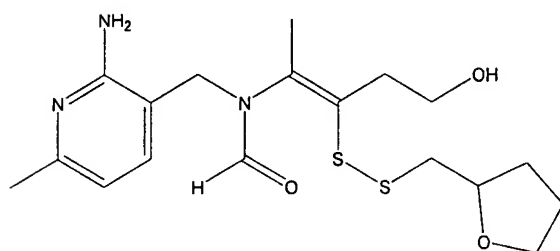
23. (new) A compound of the formula :

(a)



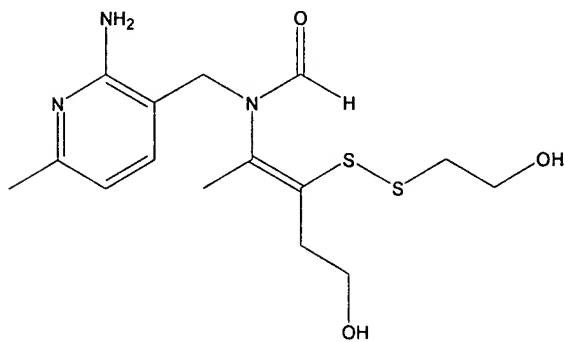
;

(b)



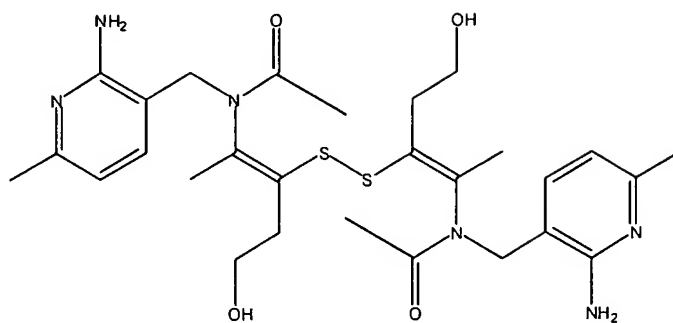
;

(c)

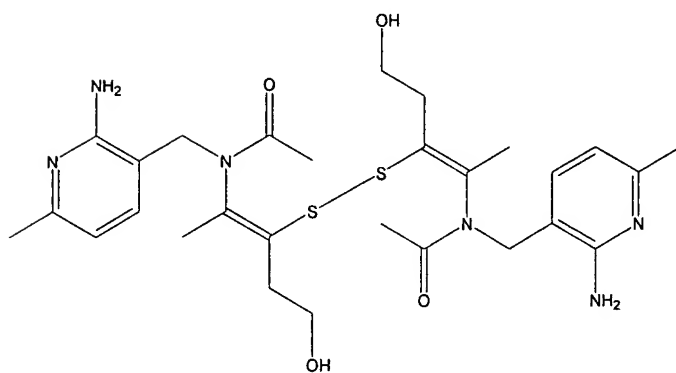


;

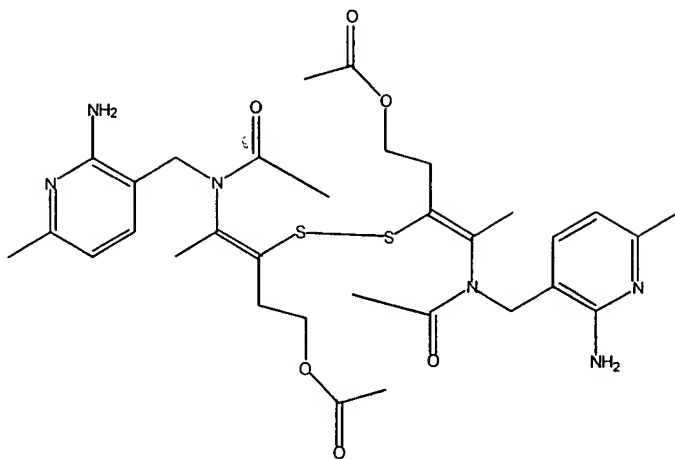
(d)



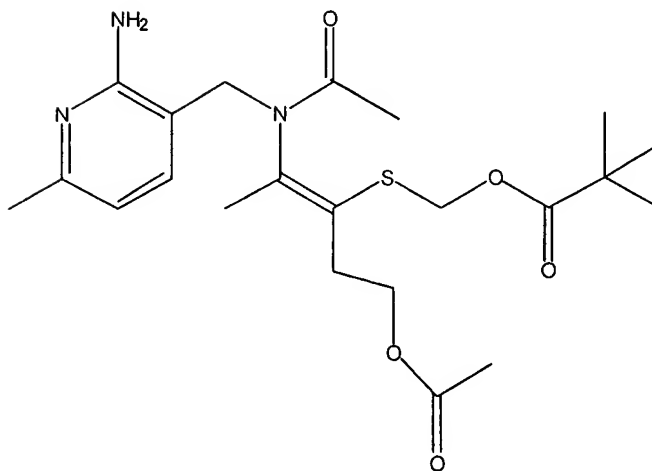
(e)



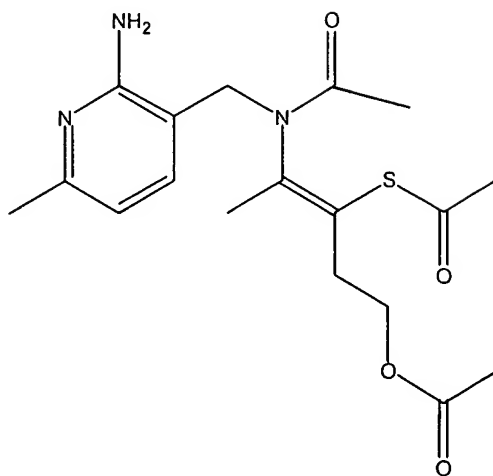
(f)



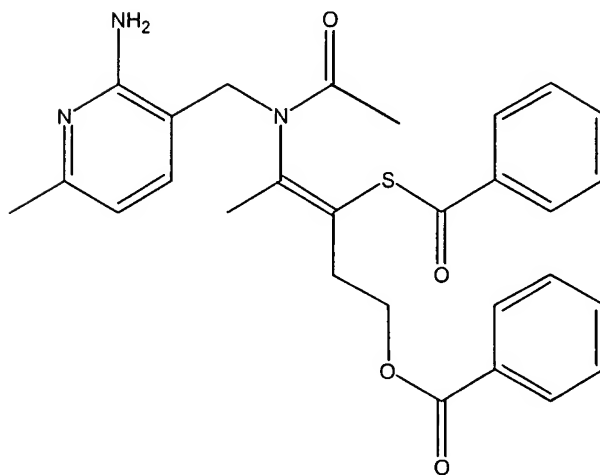
(g)



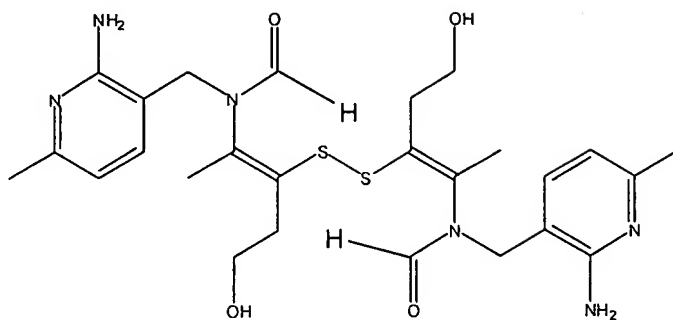
(h)



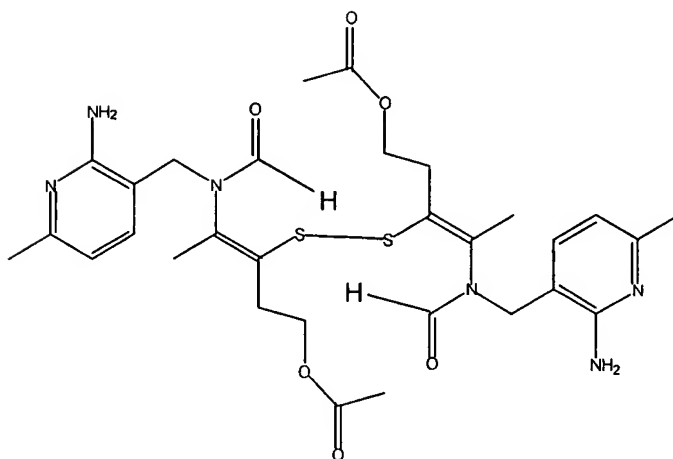
(i)



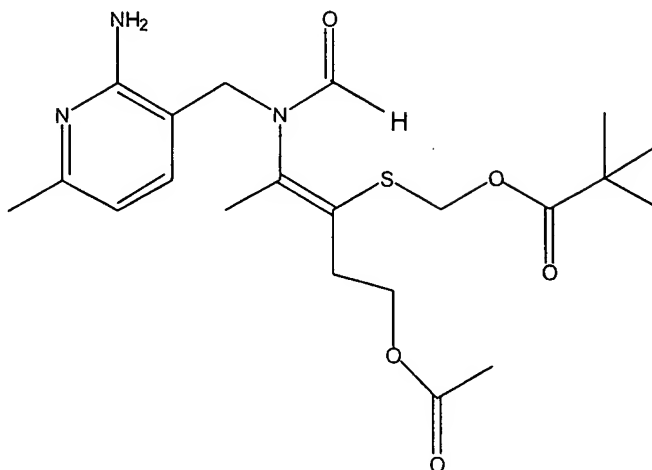
(j)



(k)

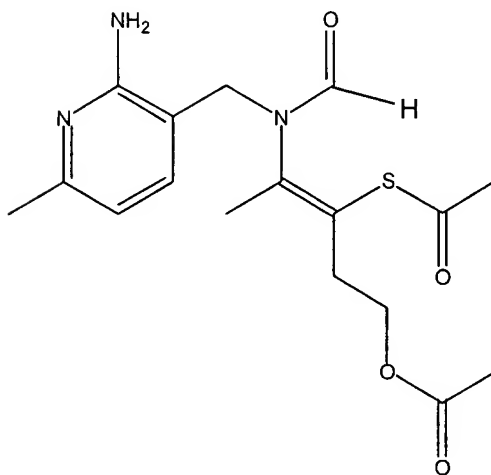


(l)



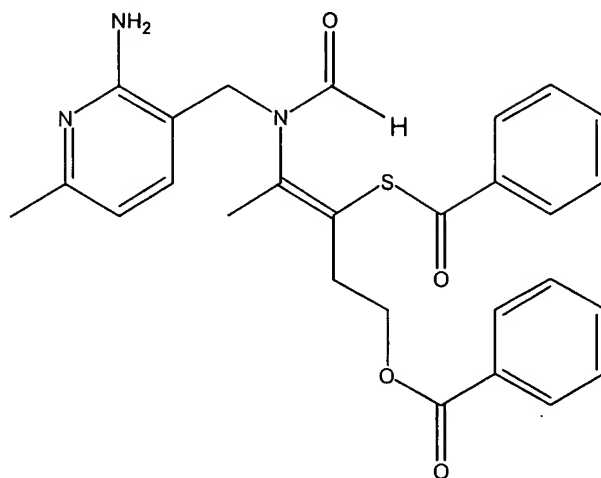
;

(m)



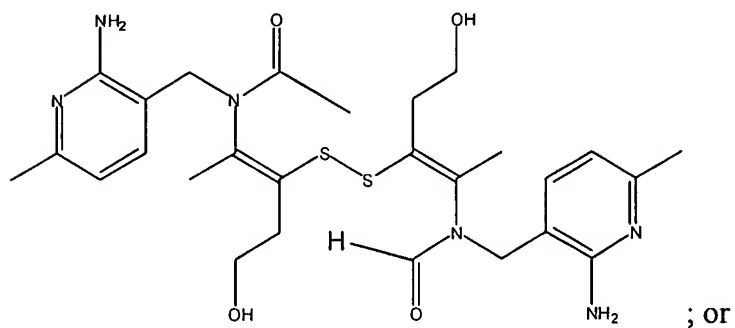
;

(n)

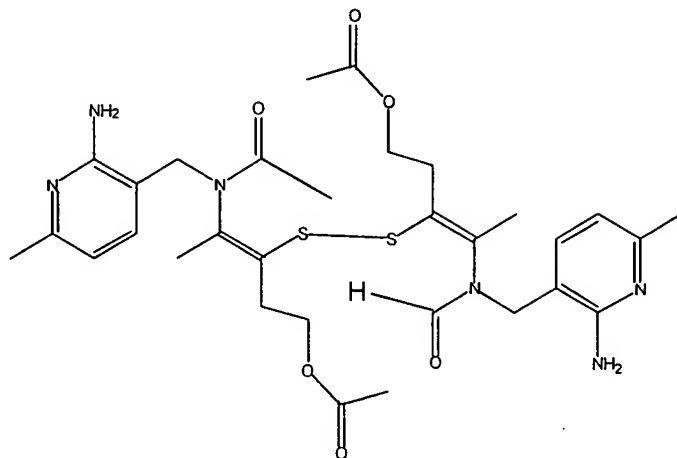


;

(o)

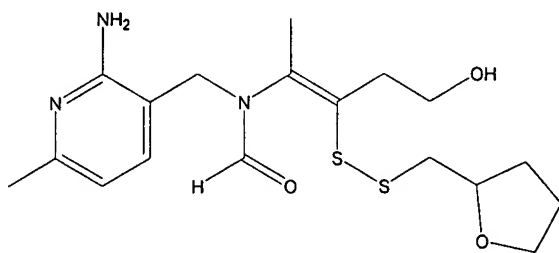


(p)

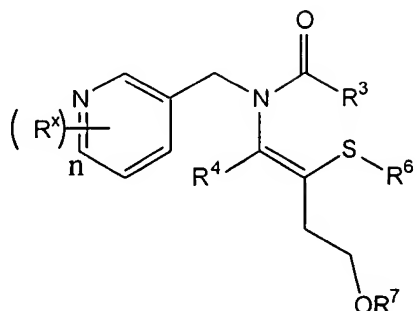


or a pharmaceutically acceptable derivative thereof.

24. (new) The compound of claim 23, wherein the compound is:



25. (new) A compound of the formula



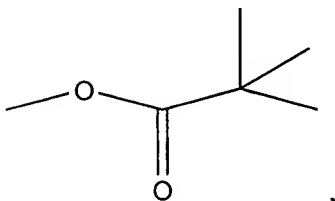
or a pharmaceutically acceptable derivative thereof, wherein:

(a)  $R^3$  and  $R^4$  may each be the same or different to the extent they occur more than once in the compound and are independently H or alkyl;

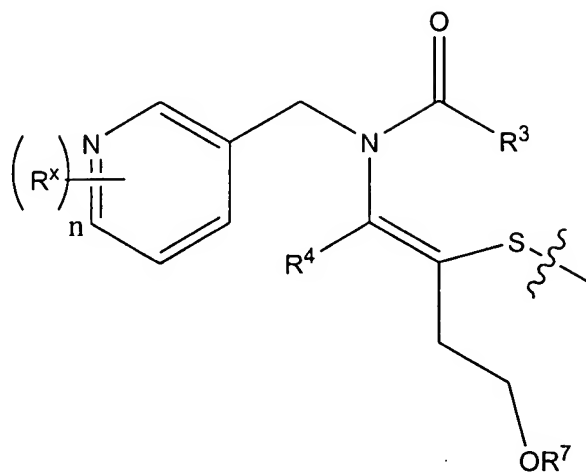
(b)  $R^7$  may be the same or different to the extent it occurs more than once in the compound and is independently  $R^\circ$  or  $-C(O)R$ , where  $R^\circ$  is H or alkyl and R is  $R^\circ$ , carbocyclyl, aryl, heterocyclyl, heteroaryl, carbocyclylalkyl, aralkyl, heterocyclylalkyl, or heteroaralkyl;

(c)  $R^x$  may be the same or different to the extent it occurs more than once in the compound and is independently alkyl or  $NH_2$ ;

(d)  $R^6$  is  $-SR$ ,  $-C(O)R$ ,



or



; and

(e)  $n$  is 0, 1, 2, or 3.